

What is claimed is:

1. In an interstitial fluid testing apparatus having a light source for generating a testing wavelength and a light detector for detecting light, said source and  
5 detector disposed in alignment to define a light path therebetween, said apparatus including a housing having an opening of predetermined geometry defining an access to said light path, a sampler comprising:
  - a main body having an operator engagable handle  
10 and a sample end;
    - said sample end having a mating geometry with said predetermined geometry for said sample end to be inserted into said opening in a predetermined repeatable alignment with a sample location of said  
15 sample end positioned within said light path;
    - a collection apparatus carried on said sampler and including:
      - A. A needle sized to protrude beyond said housing when said sampler is in said  
20 predetermined alignment with said needle protruding a distance selected for said needle to penetrate into an interstitial fluid laden skin layer when said housing is urged against said skin layer by said operator;
      - 25 B. A absorbent medium carried on said sampler and in fluid flow communication with said needle for interstitial fluid to flow from said needle onto medium;
        - said medium positioned at said sample location;
        - 30 whereby said operator may place said sample end within said opening with said medium disposed within said light path and urge said housing against said skin layer for said needle to penetrate into said skin layer for interstitial fluid within said layer to flow  
35 onto said medium and be tested by said light source

and subsequent to said testing said sampler may be removed from said housing and discarded.

2. A sampler according to claim 1 wherein said housing  
5 opening extends along a side of said housing and onto a distal end of said housing;

said mating geometry including a needle receiving portion of said body sized to project into said opening with said needle extending through said distal  
10 end of said housing.

3. A sampler according to claim 1 wherein said housing includes a first latch member;

said main body including a second latch member  
15 disposed to releasably engage and latch with said first latch member when said body is in said predetermined alignment.